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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/226,699	01/07/99	RAGUSE	B 1847/30

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HM12/0508

EXAMINER

CHIN, C

ART UNIT

PAPER NUMBER

1641

6

DATE MAILED: 05/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/226,699

Applicant(s)
Raguse et al

Examiner
Chris Chin

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1641



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 20, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 62-82 is/are pending in the application.
- 4a) Of the above, claim(s) 62-68, 81, and 82 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 69-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 62-82 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

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DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of Group II - claims 69-80 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that the groups recite common features that would require the same search. This is not found persuasive because the inventions in each of the groups recite distinct limitations that would require a separate search.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 U.S.C. § 112

3. Claims 69-80 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 69 is vague. In line 3, the recitation of "the aqueous bathing solution" lacks antecedent support. In line 6, the recitation of "the receptor" lacks antecedent support. The claim

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is not clear as to whether or not the lipid membrane actually contains a receptor since the receptor is not positively recited.

Claim 70 is vague. In line 2, the recitation of "the air-water interface" lacks antecedent support.

Claim 71 is vague. In line 2, the recitation of "the air-water interface" lacks antecedent support.

Claim 72 is vague. The claim recites improper Markush language. In line 2, the phrase "selected from" should be amended to read --selected from the group consisting of--.

Claim 73 is vague. The claim recites improper Markush language. In line 3, the phrase "selected from" should be amended to read --selected from the group consisting of--.

Claim 74 is vague. The claim recites improper Markush language. In line 2, the phrase "selected from" should be amended to read --selected from the group consisting of--.

Claim 75 is vague. The claim recites improper Markush language. In line 2, the phrase "selected from" should be amended to read --selected from the group consisting of--.

Claim 76 is vague. The recitation of "the class of molecules" lacks antecedent support. The claim is also not clear as to whether or not there is a spreading layer on the lipid membrane.

Claim 77 is vague. The recitation of "the class of molecules" lacks antecedent support. In line 3, the recitation of "such as" is not clear as to whether the example is limiting or exemplary. The claim is also not clear as to whether or not there is a filter layer on the lipid membrane.

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Claim 78 is vague. In line 1, the recitation of "the class of molecules" lacks antecedent support. In lines 3-4, the phrase "to compete off small analytes" is not clear. The claim is also not clear as to whether or not there is a "reservoir layer" on the lipid membrane.

Claim 79 is vague. The recitation of "may be bound" is not clear as to whether the water replacing agent is bound to the membrane components or not. The claim is also not clear as to which membrane component is being referred to.

Claim 80 is vague. The recitation of "may be bound" is not clear as to whether the water replacing agent is bound to the membrane spanning lipids or not.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

5. Claims 69-80 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Gitler et al, or Osman et al, or Case et al, or Lang et al.

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Gitler et al (U.S. Patent 5,204,239), Osman et al (U.S. Patent 5,234,566), Case et al (U.S. Patent 5,328,847), and Lang et al (WO 93/21528) all disclose lipid membrane biosensors with ionophores in their lipid membranes.

Claims 70-80 are being treated as process claims which do not provide any limitations to the product of claim 69. Claims 70-80 appear to recite process steps for forming the product of the claim 69.

6. Claims 69-80 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by King et al or Cornell et al or Cornell et al.

King et al (U.S. Patent 5,401,378), Cornell et al (U.S. Patent 5,436,170), and Cornell et al (U.S. Patent 5,443,955) all disclose lipid membrane biosensors with ionophores in their lipid membranes.

Claims 70-80 are being treated as process claims which do not provide any limitations to the product of claim 69. Claims 70-80 appear to recite process steps for forming the product of the claim 69.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Chin whose telephone number is (703) 308-3991. The examiner can

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normally be reached on Monday-Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le, can be reached on (703) 305-3399. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

cchin/cc
May 6, 2001



CHRISTOPHER L. CHIN
PRIMARY EXAMINER
GROUP 1800/641